

**ARG42604**  
anti-PARP2 antibodyPackage: 100 µl  
Store at: -20°C

### Summary

|                     |  |
|---------------------|--|
| Product Description | Rabbit Polyclonal antibody recognizes PARP2  |
| Tested Reactivity   | Hu, Ms, Rat  |
| Tested Application  | FACS, WB   |
| Host                | Rabbit   |
| Clonality           | Polyclonal   |
| Isotype             | IgG  |
| Target Name         | PARP2  |
| Species             | Human  |
| Immunogen           | Synthetic peptide derived from Human PARP2.  |
| Conjugation         | Un-conjugated  |
| Alternate Names     | EC 2.4.2.30; hPARP-2; ARTD2; NAD; pADPRT-2; PARP-2; Poly [ADP-ribose] polymerase 2; Poly[ADP-ribose] synthase 2; ADP-ribosyltransferase diphtheria toxin-like 2; ADPRT-2; ADPRTL2; ADPRTL3; ADPRT2 |

### Application Instructions

| Application table | Application  | Dilution       |
|-------------------|--|----------------|
|                   | FACS   | 1:30           |
|                   | WB   | 1:500 - 1:2000 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |
| Positive Control  | Raji   |                |
| Observed Size     | ~ 65 kDa   |                |

### Properties

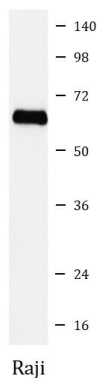
|                     |   |
|---------------------|---|
| Form                | Liquid  |
| Purification        | Affinity purified.  |
| Buffer              | PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.   |
| Preservative        | 0.02% Sodium azide  |
| Stabilizer          | 50% Glycerol  |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

|                       |   |
|-----------------------|---|
| Gene Symbol           | PARP2   |
| Gene Full Name        | poly (ADP-ribose) polymerase 2  |
| Background            | This gene encodes poly(ADP-ribosyl)transferase-like 2 protein, which contains a catalytic domain and is capable of catalyzing a poly(ADP-ribosyl)ation reaction. This protein has a catalytic domain which is homologous to that of poly (ADP-ribosyl) transferase, but lacks an N-terminal DNA binding domain which activates the C-terminal catalytic domain of poly (ADP-ribosyl) transferase. The basic residues within the N-terminal region of this protein may bear potential DNA-binding properties, and may be involved in the nuclear and/or nucleolar targeting of the protein. Two alternatively spliced transcript variants encoding distinct isoforms have been found. [provided by RefSeq, Jul 2008]   |
| Function              | Poly-ADP-ribosyltransferase that mediates poly-ADP-ribosylation of proteins and plays a key role in DNA repair (PubMed:10364231, PubMed:28190768, PubMed:25043379). Mainly mediates glutamate and aspartate ADP-ribosylation of target proteins: the ADP-D-ribosyl group of NAD(+) is transferred to the acceptor carboxyl group of glutamate and aspartate residues and further ADP-ribosyl groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units (PubMed:25043379). ADP-ribosylation follows DNA damage and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks (PubMed:10364231). Also mediates serine ADP-ribosylation of target proteins following interaction with HPF1; HPF1 conferring serine specificity (PubMed:28190768). In addition to proteins, also able to ADP-ribosylate DNA: preferentially acts on 5'-terminal phosphates at DNA strand breaks termini in nicked duplex (PubMed:27471034). [UniProt] |
| Calculated Mw         | 66 kDa  |
| PTM                   | Poly-ADP-ribosylated by PARP1.<br><br>Acetylation reduces DNA binding and enzymatic activity. [UniProt]   |
| Cellular Localization | Nucleus. [UniProt]  |

## Images



ARG42604 anti-PARP2 antibody WB image

Western blot: Raji cell lysate stained with ARG42604 anti-PARP2 antibody.